

REMARKS/ARGUMENTS

Claims 40-52 were pending in the present application. The present response amends claims 40, 42, 48, and 50, leaving pending in the application claims 40-52. Reconsideration of the rejected claims and consideration of the newly presented claims is respectfully requested.

I. Rejection under 35 U.S.C. §103

Claims 40-52 are rejected under 35 U.S.C. §103(a) as being obvious over *Hart* (US 6,192,061) in view of *Opower* (US 4,939,738).

Claim 40 requires a laser structure defined by:

an elongated, dielectric waveguide structure having a plurality of waveguide channels therein, said waveguide channels including a gaseous gain medium;

a pair of electrodes including a first electrode extending along a first elongated surface of the waveguide structure and a second electrode extending along a second elongated surface of the waveguide structure, the first elongated surface being opposite and parallel to the second elongated surface, each of said first and second electrodes being divided into spaced apart first and second electrode portions, each of said spaced apart first and second electrode portions of said first electrode being electrically connectable to an RF power supply for applying an RF potential across said gain medium;

a metal housing enclosing said waveguide structure and said pair of electrodes, with said first electrode being electrically isolated from said metal housing; and

a metal shield located between said spaced apart first and second portions of each of said first and second electrodes, the metal shield being positioned orthogonal to said first and second elongated surfaces so as to prevent RF coupling between said spaced apart first and second portions.

(*emphasis added*).

Hart does not teach or suggest such limitations. The embodiment of Figure 8 cited in the Office Action is drawn to “an improved clamping arrangement” in a system with two metal electrodes having a ceramic waveguide disposed therebetween (col. 5, lines 7-31). *Hart* does not teach or suggest using a pair of electrodes, with each electrode being divided into spaced apart first and second portions, or an orthogonal metal shield positioned between the portions in order to prevent RF coupling. *Hart* does not provide any motivation to split electrodes into portions, or suggest steps necessary to prevent RF coupling in the *Hart* system. *Hart* therefore cannot render claim 40 obvious.

Opower does not make up for the deficiencies in *Hart* with respect to claim 40. *Opower* teaches a waveguide in which “a plurality of metal plates” are applied to the outer sides of the waveguide “in order to bring about an electric discharge” (col. 6, line 57-col. 7, line 11). The use of a plurality of plates enables “a defined electric field to be generated in the discharge chamber” which allows the discharge to be “more homogeneous” (col. 7, lines 4-11). *Opower*

does not teach or suggest, however, an orthogonal metal shield positioned between the metal plates in order to prevent RF coupling between the plates.

The Office Action states on p. 3 that “*Opower* discloses shielding located between said spaced apart first and second portions of said first and second electrodes, the metal shield being positioned orthogonal to said first and second elongated surfaces so as to prevent RF coupling between said spaced apart first and second portions of said first and second electrodes, see col. 6, lines 60-67.” Applicants respectfully submit instead that the disclosure at col. 6, lines 60-67 simply states that metal plates 68 and 70 bring about a dielectric charge in the discharge chamber, and the arrangement is advantageous because the formation of a current path in the discharge chamber can be prevented. *Opower* simply teaches that if each metal plate generates a similar electric field, there will be virtually no current flow in the discharge chamber. This does not in any way teach or suggest the use of shielding, and in fact implies that if equal power was not applied to each metal plate of the *Opower* system that current indeed would flow through the chamber. *Opower* does not teach or suggest the need for a shielding between metal plates, let alone a metal shield located orthogonally between the metal plates so as to prevent RF coupling the plates. As such, *Opower* cannot render claim 40 obvious, either alone or in combination with *Hart*. Claim 41 depends from claim 40 and therefore also is not rendered obvious.

Claims 42-50 also require a metal shield for preventing RF coupling between electrode portions. As discussed with respect to claim 40, neither *Hart* nor *Opower* teach or suggest such a shield. As such, claims 42-52 cannot be rendered obvious by *Hart* and *Opower*.

Applicants therefore respectfully request that the rejection with respect to claims 40-52 be withdrawn.

II. Amendment to the Claims

Unless otherwise specified, amendments to the claims are made for purposes of clarity, and are not intended to alter the scope of the claims or limit any equivalents thereof. The amendments are supported by the specification and do not add new matter to the specification.

III. Conclusion

In view of the above, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the pending claims and a notice of allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. COHO-4630. **A duplicate copy of the transmittal cover sheet attached to this Response to Final Office Action Mailed March 26, 2004, is provided herewith.**

Respectfully submitted,

STALLMAN & POLLOCK LLP

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By: 

Jason D. Lohr
Reg. No. 48,163

Attorneys for Applicant(s)